

Title (en)  
Hydro-pneumatic suspension system

Title (de)  
Hydropneumatisches Aufhängungssystem

Title (fr)  
Système de suspension hydropneumatique

Publication  
**EP 1231085 A2 20020814 (EN)**

Application  
**EP 02394020 A 20020211**

Priority  
IE 20010125 A 20010209

Abstract (en)  
A suspension system for a vehicle has an upper control arm (3) and an associated lower control arm (4) for mounting a wheel on the vehicle body (6). A hydro-pneumatic spring (2) is connected between one of the control arms and the vehicle body. A compensating spring (16) is associated with the hydro-pneumatic spring and is operable to act in opposition to the force exerted by the hydro-pneumatic spring as the hydro-pneumatic spring approaches full extension. <IMAGE>

IPC 1-7  
**B60G 11/56**

IPC 8 full level  
**B60G 17/04** (2006.01); **B60G 17/048** (2006.01); **F16F 9/06** (2006.01); **F16F 9/48** (2006.01)

CPC (source: EP US)  
**B60G 11/56** (2013.01 - US); **B60G 11/58** (2013.01 - EP US); **B60G 15/061** (2013.01 - EP US); **B60G 15/12** (2013.01 - EP US); **B60G 17/04** (2013.01 - EP US); **B60G 17/048** (2013.01 - EP US); **F16F 9/06** (2013.01 - EP US); **F16F 9/065** (2013.01 - EP US); **F16F 9/48** (2013.01 - EP US); **F16F 13/002** (2013.01 - US); **B60G 2200/144** (2013.01 - EP US); **B60G 2200/44** (2013.01 - EP US); **B60G 2202/12** (2013.01 - EP US); **B60G 2202/154** (2013.01 - EP US); **B60G 2204/129** (2013.01 - EP US); **B60G 2204/19** (2013.01 - EP US); **B60G 2204/416** (2013.01 - EP US); **B60G 2204/45** (2013.01 - EP US); **B60G 2204/4504** (2013.01 - EP US); **B60G 2206/422** (2013.01 - EP US); **B60G 2500/20** (2013.01 - EP US)

Cited by  
EP2116403A1; FR2988453A1; EP1663678A4; CN102287472A; EP1584502A1; US7766136B2; US8151953B2

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)  
**EP 1231085 A2 20020814**; **EP 1231085 A3 20040107**; **EP 1231085 B1 20070425**; AT E360543 T1 20070515; DE 60219708 D1 20070606; DE 60219708 T2 20071227; US 2002109327 A1 20020815; US 2004232606 A1 20041125; US 2007132163 A1 20070614; US 2010156012 A1 20100624; US 2013127132 A1 20130523

DOCDB simple family (application)  
**EP 02394020 A 20020211**; AT 02394020 T 20020211; DE 60219708 T 20020211; US 201313744721 A 20130118; US 50905809 A 20090724; US 65383107 A 20070117; US 7108302 A 20020211; US 88377404 A 20040706